



# CITY OF LODI

## COUNCIL COMMUNICATION

AGENDA TITLE: Report on San Joaquin Station Study

MEETING DATE: November 3, 1993

PREPARED BY: Assistant City Manager

The City has received the final report on Phase One of the San Joaquin Stations Program. The Report is on file in the City Manager's office. I have attached hereto the letter of transmittal to the Multimodal Advisory Review Committee, a portion of the Executive Summary, and the body of the report which pertains to Lodi.

Respectfully submitted,

Jerry L. Glenn  
Assistant City Manager

JLG/vc

Attachments

APPROVED:

THOMAS A. PETERSON  
City Manager



recycled paper



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OCT 21 1993

City Manager's Office

October 18, 1993

TO: Multimodal Advisory Review Committee (MARC) Members  
FROM: Doralee Boles *DB* San Joaquin Stations Project Manager  
SUBJECT: San Joaquin Stations Program Phase One Final Report

The enclosed Final Report represents Wilbur Smith Associates recommendations for multimodal station development in the communities of Lodi, Manteca/Lathrop, and Tracy. The work effort was managed by the San Joaquin County Department of Public Works and guidance was given by the MARC, which provided policy and technical assistance. The Final Report concludes the first phase of the San Joaquin County Stations Program and provides feasibility analysis and site assessment within each community.

The Stations Program is an integral element in the development of facilities countywide to enhance local and interregional mass transit services. In addition to rail, the multimodal stations will also serve Countywide bus, intercity bus, local bus, taxi, and dial-a-ride needs. Where possible, the stations will be developed to further local and regional economic development goals. The multimodal stations will provide flexibility allowing the County and Cities to maximize the use of public transportation, while adapting to expected and unanticipated transit developments in the region.

The Stations Program is a four phase multi-year project which has received an appropriation of State Transit Capital Improvement (TCI) Program funds in the amount of \$566,800 to conduct the second phase work effort. Phase Two will consist of Master Site Planning, Environmental Review, and Preliminary Engineering. In December, the California Transportation Commission is scheduled to act upon the County's request for allocation of funds to proceed with Phase Two. In the interim, County staff is drafting a scope of work to guide consultant efforts that will be circulated for review and comment shortly.

The County looks forward to a continued relationship of cooperativeness between the involved agencies as the San Joaquin Stations Program proceeds towards the acquisition of right-of-way and the commencement of construction. Your involvement and efforts in Phase One were invaluable to the work product. Your continued support will be crucial to the success of these projects.



## IDENTIFICATION OF POTENTIAL STATION SITES

### Introduction

The consultant team developed a list of potential station site locations in the four cities based on field observations, review of prior documents and discussions with County and local officials. These are described briefly in this section.

### Lodi

Three station sites were initially identified for Lodi (see Figure 2):

1. Present downtown station site on Sacramento Street between Elm and Pine Streets (the station is not currently in use);
2. A location just south of the depot site and East Pine Street, on Sacramento Street centered between East Oak and East Walnut adjacent to the tire store; and
3. Near the southwest corner of the East Kettleman (SR 12) and South Stockton Street intersection.

Sites 1 and 2 are both downtown and near the historic train depot and the retail center. They are also adjacent to a strip of run-down bars and clubs. Site 2 is partially occupied by a tire store. Site 3 is a more suburban location, surrounded by a mix of light industrial, commercial, and residential uses; the site is currently occupied by a vacant home products store.

Other sites further north and south of these sites along the SP tracks were investigated but were rejected primarily because access was poor or insufficient land was available.

### Manteca/Lathrop

Originally, study scope called for investigating sites in Manteca alone. However, the close proximity of the two cities and the availability of more rail service options (see Chapter 2) led to investigating the possibility of a station that could serve both cities that might not necessarily be located in the current Manteca city limits. Several station sites were identified during the initial phase of the study (Figure 3).

### Downtown Manteca

1. Moffat Boulevard near Garfield Avenue, east of Main Street on the SP;
7. Between Main and Yosemite Streets on the SP;

### Southwest Manteca Near Lathrop

2. UP tracks and Yosemite Avenue, east of McKinley Avenue and near the Manteca-Lathrop border;



Panoche Passes) with a Stockton-Sacramento spur, it is likely that a new alignment will be necessary and that one or two regional stations will be designed in the county specifically to serve this alignment. Station locations on high-speed rail lines are generally widely spaced, and it is unlikely that either Manteca or Lodi would be chosen as stops due to their relative proximity to Stockton. A Tracy station serving both the local population and west side San Joaquin Valley points is more likely, probably near I-580.

## SUMMARY AND CONCLUSIONS

This section summarizes the impact that rail considerations have on siting and operating multimodal stations in each of the three cities.

### Lodi:

Rail issues in Lodi are the least complex of the four cities. It is likely (but not assured) that intercity<sup>2</sup> rail service will operate along the SP at some point in the not too distant future. Commuter service<sup>2</sup> may or may not be operating on the SP. If it runs on the UP, a stop near Lodi might be justified, but would not warrant construction of a multimodal terminal because it would probably not interface with intercity rail and local transit. Therefore, locations along the SP should be pursued for the multimodal station.

### Manteca/Lathrop

There is a considerable amount of uncertainty regarding future passenger rail operations in the Manteca and Lathrop areas. For downtown Manteca to have future passenger rail service, a number of decisions must be made:

- Amtrak San Joaquin service to the Bay Area and/or Sacramento must be shifted to the SP (which, as previously discussed, is unlikely to happen in the short term).
- If shifted to the SP, a decision to stop in Manteca must be made by Caltrans Division of Rail.
- Commuter rail service planned over the Altamont to the Bay Area would need to be directed southeast toward Manteca and Modesto. Current planning appears oriented more toward the Stockton/Sacramento corridor, but it might be possible to have two branches of the Altamont service. This will be considered in later phases of the Altamont study.

Lathrop and the unincorporated area west of Manteca stand a far better chance of having Altamont commuter service since it is located along both SP and UP lines heading from the Bay Area to Stockton. Since commuter rail would have reasonably frequent stops (every 5 miles or so apart), a stop serving

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<sup>2</sup> The terms "intercity" and "commuter" are used informally in this chapter to describe potential service. San Joaquin Service currently operated by Amtrak is obviously "intercity". Service over the Altamont may include either or both commuter and intercity - it is referred herein as "commuter". In any event, these terms are not intended to be used in the legal context as defined in California's Streets and Highways Code section 164.50(d).



These concerns have been addressed in the following discussions of each city's particular layout.

Five site location criteria relating to transit have been defined for evaluating alternative station sites:

1. On or near current or proposed transit routes;
2. Logical terminus for transit routes;
3. Room to accommodate increases in transit use;
4. Enhances County's long-range transit plan; and
5. Convenient to transit dependents.

### Lodi

#### **Existing Transit Service Setting**

Lodi Public Transit provides demand-responsive transportation service to the City. There are short-range plans to establish fixed-route service consisting of four routes using small, 20 to 40-foot length vehicles. These buses would probably operate in a pulsing mode based downtown.

The San Joaquin County Transit System Plan proposes establishment of fixed-route service between Lodi and Stockton in addition to interregional bus/rail service to Sacramento. The Stockton-Lodi connection is a likely short-term service improvement.

Greyhound and Orange Belt Stages both provide service to Lodi on their Sacramento-Stockton lines. Caltrans previously provided feeder bus service to Lodi, but discontinued this service apparently because of poor patronage. Rail passengers more often will drive to Stockton and Sacramento to reach intercity rail passenger service rather than use feeder buses. Delta Casino, a private operator, also services Lodi from the Greyhound Depot.

Lodi is also planning for a local bus system that would probably provide for a time-transfer in the downtown area.

#### **Site Evaluation**

Local fixed-route transit routes would probably hub at either downtown station site, but not at the Kettleman site. Transit Center hubs are generally located downtown, since downtowns are principal passenger origins-destinations and usually are centrally located with respect to bus service areas. San Joaquin County buses would probably terminate and lay over at a downtown site or be through-routed to the Kettleman site. Amtrak feeder buses probably will focus on Stockton or Sacramento and not stop at a Lodi station. Greyhound conceivably could serve any Lodi site, but would be more likely to serve sites either downtown or convenient to the freeway.

At Site 1 downtown, four local bus and two San Joaquin Countywide bus bays should be provided along with two bays for Greyhound. Site 2 would have the same requirements as Site 1. Site 3 is not a logical location for either Greyhound service, pulsing Lodi local buses or terminating Countywide bus service.

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#### **Transit Requirements**



As such, one loading position for local service and one for Countywide service should be adequate for Site 3. Paratransit vehicles would load from general curb areas.

Table 4 below summarizes desired long range bus loading facility needs for the various Lodi Station sites. These are somewhat conservative and could be reduced depending upon actual scheduling.

Table 4 Lodi Location Assessment and Bus Loading Facility Needs			
	<--- Candidate Sites --->		
	1. Existing Site	2. Relocated Site	3. Kettleman
Location	<--- Site Assessment --->		
Local Bus	Good	Good	Fair
County Bus	Good	Good	Fair
Greyhound	Good	Good	Fair
Amtrak Feeder Bus	Fair	Fair	Fair
Service	<--- Desired Loading Positions --->		
Local Bus	4	4	1
County Bus	2	2	1
Greyhound	2	2	-
Amtrak Feeder Bus	-	-	-
Paratransit	2	2	2

With respect to the five site location evaluation criteria listed previously for transit and other buses, Sites 1 and 2 perform similarly well. Both are convenient to future transit and bus services including Greyhound. The sites are logical layover/station points and provide ample site area to accommodate future needs. The downtown locations are also accessible to transit dependent population having significant pedestrian traffic and probable local bus service.

### Manteca-Lathrop

#### Existing Transit Service Setting

Neither Manteca nor Lathrop presently has a fixed-route local transit service. Manteca has not adopted plans leading towards establishing a fixed-route bus service. Build-out characteristics, however, suggest that a small local fixed-route bus service probably would be established in the future. Lathrop's General Plan provides for a population growth to 30,000 by Year 2012 and designates right-of-way reserves for possible future light rail service.



I-205 carries very heavy volumes (63,000 to 88,000 vehicles) for a four-lane freeway. Widening to six lanes is already funded from the Alameda County line to Eleventh Street in Tracy. Widening of the section east of Eleventh Street to I-5 is planned, but not funded. Eventual widening to eight lanes is also planned, but not likely to be in place before Year 2005. While there are already several interchanges to Tracy streets, others are being planned for the Hansen Road, Lammers Road, Chrisman, and Banta Road extensions.<sup>1</sup>

The most serious current congestion spots near station sites are on I-205 north of Tracy and SR-99 south of Manteca. The *Tracy Urban Management Plan* indicates that Level-of-Service (LOS) E/F conditions are likely to persist on I-205 for a number of years, considering the length of time until I-205 is widened sufficiently.<sup>2</sup> In fact, a total buildout scenario would result in LOS E or F conditions on sections of I-205, Linne Road, Lammers Road, Patterson Pass Road, Eleventh Street, Tracy Boulevard and Grant Line Road, even with planned improvements.<sup>3</sup>

Although this does not directly affect any station sites, SR-99 near Stockton operates at 90% of capacity (LOS E). Also Caltrans statistics indicate that I-5 between I-205 and SR-120 operates at 90% of capacity (LOS D/E).<sup>4</sup>

### Evaluation Criteria

The consultants used four broad categories for evaluation of traffic factors: accessibility/convenience, visibility, residential impacts, and grade crossing impacts. A broad description of these criteria and the kinds of data used to rate each are contained in Table 7.

## LODI STATION SITES

### Descriptive Comparison of Sites

**Accessibility/Convenience** -- Site 3 is generally superior to the other sites in accessibility to regional traffic. It is located on a four-lane arterial (SR-12 - East Kettiman Lane) about 0.8 miles from the SR-99 freeway interchange. Access to the freeway (with its 40,000 daily vehicles) is relatively direct, with few signalized intersections between the site and SR-99. It is also strategically located to intercept commuters heading toward Stockton, although it would represent a significant backtrack for most heading toward Sacramento. (Although Stockton is a much larger commuter destination for Lodi residents, the relatively short Stockton-Lodi distance would likely make this trip less attractive as an inter-city bus or rail trip than Lodi-Sacramento.)

<sup>1</sup> Fehr & Peers Associates for the City of Tracy, *Transportation Element of the Tracy Urban Management Plan EIR*, April 1992, page 14.

<sup>2</sup> City of Tracy, *Urban Management Plan*, 1992, p. 64.

<sup>3</sup> Fehr & Peers, *Transportation Element of the Tracy Urban Management Plan EIR*, 1992, p. 19.

<sup>4</sup> Caltrans, 1991 *Route Segment Report*.



Sites 1 and 2 are both located on a north-south arterial, about one mile from the SR-99/Victor Road interchange. The travel time between the freeway and the sites is longer than for Site 3 due to the circuitous routing and more frequent intersections. Circulation in the station area would be affected by downtown traffic, but both sites are more centrally located than Site 3.

**Future Changes in Accessibility due to Traffic Growth** -- Future traffic growth is not expected to lead to serious congestion near any of the sites within the next 15 years. Peak hour traffic on Kettleman Lane is expected to increase from about 2,100 to 2,700 at General Plan Buildout. (Kettleman is planned as a major arterial, with six through lanes and median islands with left turn pockets.<sup>5</sup> If improved to this extent, Kettleman should be able to handle increased traffic and operate at acceptable Levels of Service.) Peak hour traffic on Lodi Avenue over the railroad crossing is expected to increase slightly from roughly 2,000 to 2,100 vehicles and on Pine Street from about 600 to 1,000 vehicles. Lodi Avenue is planned as a minor arterial (four through lanes with median island and left turn pockets).

**Visibility** -- Sites 1 and 2 have slightly better visibility than Site 3, due to their location within blocks of the downtown center and at or near the historic depot and Lodi Arch. However, higher vehicular traffic volumes actually pass by Site 3.

**Residential Impacts** -- Residential traffic impacts are not expected to be significant for any of the sites since they are located in commercial/industrial areas and have good arterial access. Given their location near the downtown center, the historic depot, and the Greyhound bus depot, Sites 1 and 2 would be considered compatible locations. Although fairly close to residential neighborhoods, Site 3 is near other intensive uses on Kettleman Lane.

**Grade Crossings** -- City staff members expressed concern about the possibility of streets being blocked by trains waiting at or slowing near Site 1. In particular, the Fire Department feels strongly that Elm Street (north of the existing train station) needs to be kept open for fire access.

The other two sites appear superior in this respect. East Oak and East Walnut (near Site 2) are already closed near the tracks. Near Site 3, the tracks are grade-separated from Kettleman Lane. Furthermore, there are no grade crossings within about a mile of Site 3.

The impact of grade crossing protection is analyzed in more detail in Chapter 5.

### Site Evaluation

There is no clearly superior site based on traffic criteria in Lodi (as indicated in following table). Preference for one site will likely be based on non-traffic criteria, such as ability to function as a transit transfer site and to spur local revitalization. However, Site 3 appears slightly superior to the other two on traffic criteria due to its proximity to the SR-99 freeway and East Kettleman SR-12 arterial. Site 1 has the most serious traffic associated flaw related to concern over grade crossing impacts.

<sup>5</sup> City of Lodi, Street Master Plan, 1992.





Table 7 LODI STATION SITES: TRAFFIC EVALUATION			
Criteria	Site 1	Site 2	Site 3
Accessibility/Convenience	Good	Good	Good
Visibility	Good	Good	Fair
Residential Impacts	Good	Good	Good
Grade Crossings	Poor	Fair	Good
Wilbur Smith Associates; February 1993			

## MANTECA/LATHROP SITES

### Descriptive Comparison of Sites

**Accessibility/Convenience** -- Site 1 (Moffat Boulevard) has good arterial and freeway access, located slightly over a mile from the SR-99 and SR-120 interchanges.

Site 2 (Yosemite Avenue West) is currently very accessible by traffic in the Manteca/Tracy area. It is located in a good position to intercept traffic headed toward Tracy, the Bay Area, and the I-5 corridor. It is on an arterial that is generally five lanes wide, but carries fairly low volumes. It has moderately good access to the SR-120 freeway bypass, located about 1.5 miles from both the Airport Way and Yosemite Avenue/Guthmiller Road interchanges.

Sites 3 and 5 are similar in that their primary access would be from two to three-lane roads (planned for improvement to four lanes), and they are located over a mile from the I-5/Lathrop Road interchange, and five miles from I-99.

Site 4 is located well for intercepting trips to Tracy and the Bay Area from both Manteca and Lathrop, but is in an area that currently has limited access via city streets, although the I-5/Mantney Road interchange provides some freeway access. While the development plans related to Gold Rush City could significantly improve freeway access, there are no definitive plans for an interchange on I-5 close to the site.

In fact, the I-5/Mantney Road hook ramps are planned to be closed. According to the Lathrop *General Plan* the most likely freeway interchange is conversion of the I-205 grade separation at Paradise Road to a full interchange possibly with another interchange closer to the station site. Also, the General Plan lists three new arterials that could connect Gold Rush City with neighboring streets:

- (1) A north-south expressway west of I-5 extending south from Lathrop Road to I-205 and Tracy;
- (2) An expressway extension of Louise Boulevard; and
- (3) An expressway extension of Yosemite Avenue.



## 5. ANALYSIS OF STATION SITES

### INTRODUCTION

This Chapter describes the process used to recommend station sites in the three areas. The first part of the Chapter describes key issues in each City and how these were resolved in the technical and political/community process. The cost of the shortlisted sites and environmental impacts are described at the end of the Chapter.

The process followed was similar in all three areas:

1. The consultant team met with City staff and, in the case of Lodi, with the City Council to gain information on potential sites.
2. The team, through the screening process described elsewhere, prepared a shortlist of potential sites. These were then presented to the TAC and to City staff for concurrence.
3. Further required technical analyses, conceptual site plans and costs were determined for the shortlisted sites.
4. The data on each site and the consultants' recommendations were presented to each City Council for their review in a workshop setting.

### LODI

#### Issues and Potential Sites

Based on early analysis and discussions with City staff, key issues that impact a multimodal station in Lodi are:

1. Feasibility and cost of reusing and/or moving the existing station structure;
2. Cross-traffic on Pine and Elm streets, particularly regarding potential blocking of street by stopped trains;
3. Integrating design with the downtown commercial district and possible joint development; and
4. Use of Station to upgrade appearance and economic viability of businesses on Sacramento Street.



Three sites were presented to the TAC:

1. Current SP Station between Pine and Elm;
2. Relocated SP Station just south of Pine; and
3. Southeast corner of SP tracks and Kettleman Lane.

Responding to comments at the TAC meeting, sites north of Elm Street were examined with Jerry Glenn, Assistant City Manager, on October 30. No suitable site was identified during that trip.

Based on discussions with Lodi City staff and a "shirtsleeves" meeting with the City Council early in the Study, strong support was identified to locate the station at or near the existing SP station at Pine and Sacramento (Sites 1 or 2).

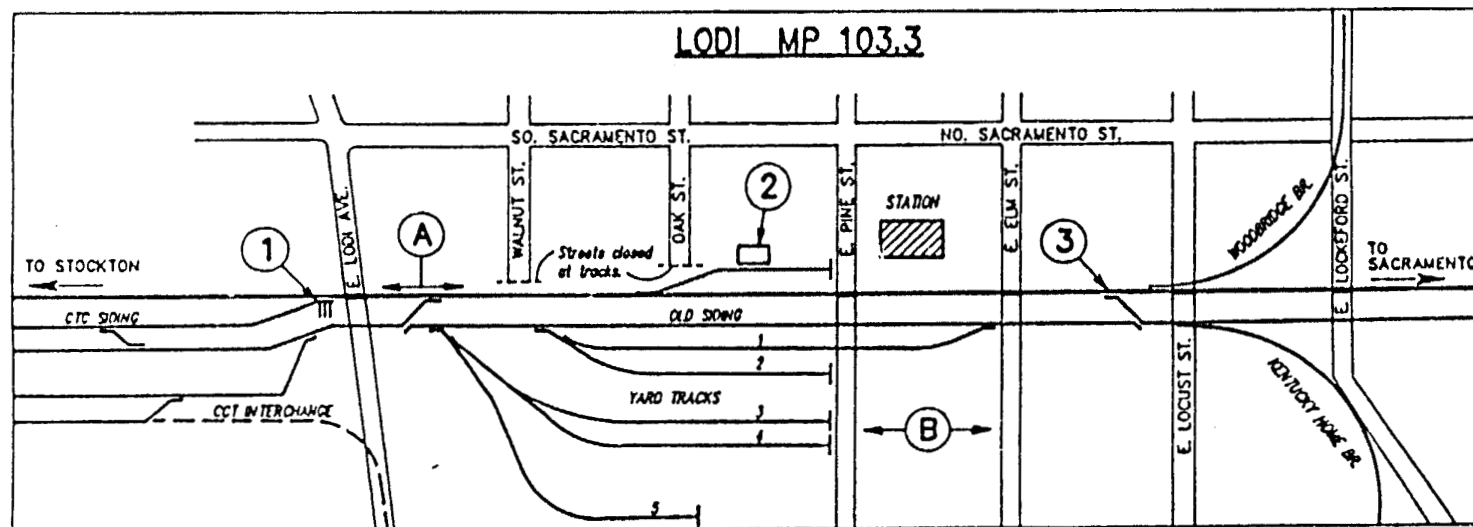
#### Grade Crossings

The viability of Sites 1 and 2 is dependent on the amount of disruption due to increased grade crossings. Therefore, a detailed analysis of grade crossing impacts in Lodi was prepared. Transmetrics, Inc. prepared an analysis of the grade crossings from a railroad operations standpoint. Wilbur Smith Associates then analyzed the traffic impacts of the crossings at Pine and Elm (see Figure 7 for a detailed plan of rail facilities in the area).

Four scenarios were examined:

1. A station in its present location where both northbound and southbound trains would clear East Elm Street but block East Pine Street during loading and unloading (Site 1).
2. A station located south of Pine Street in the property now used as a team track and unloading ramp for carload business for the railroad. In that location, the passenger train stop could be made northbound or southbound and not block East Pine Street or any crossing (Site 2).
3. A station located elsewhere in the City so that passenger trains would cross Pine and Elm streets at currently required through speed for freight trains (Site 3 or equivalent).
4. No passenger service, freight only (used as a basis of comparison).

Table 10 presents calculations of the times these crossings are occupied during a single event train crossing and during the course of a day. The total daily times are summarized in Table 11.



1. NORTH SWITCH FROM LODI SIDING MP 103.1 POWER OPERATED
2. LODI TEAM TRACK AND FREIGHT DOCK. LOT APPROX. 500' WIDE
3. CROSSOVER USED BY LODI LOCAL TO CROSS OVER TO AND FROM WOODBRIDGE BRANCH
- A. APPROXIMATELY 1380' BETWEEN E. LOCUST AVE. AND E. PINE ST.
- B. APPROXIMATELY 334' BETWEEN E. PINE ST. AND E. ELM ST.

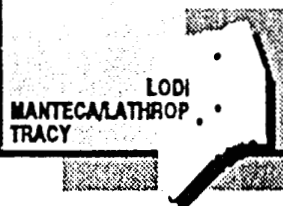


FIGURE 7  
**DOWNTOWN LODI RAIL FACILITIES**

TABLE 10  
GRADE CROSSING OCCUPANCY  
LODI, CALIFORNIA

ALL TIMES SHOWN IN MINUTE

Scenario	EAST PINE STREET								EAST ELM STREET							
	Gates Down Prior to Crossing	Moving on Crossing	Train Stopped on Crossing	Gates Up After Crossing	Total Times Traffic Stopped	Number Trains Per Day	Daily Total Time Traffic Stopped	Total Daily Delay: Freight 49.6	Gates Down Prior to Crossing	Moving on Crossing	Gates Up After Crossing	Total Time Traffic Stopped	Number Trains Per Day	Daily Total Time Traffic Stopped	Total Daily Delay: Freight 49.6	
Through Freight North & Southbound 3500' 40 mph	.3	1.0	-.0	.1	1.4	18	25.2		.3	1.0	.1	1.4	18	25.2		
Through Freight to or from Lodi Siding to 3500' 25 mph	.3	1.6	-.0	.1	2.0	2	4.0		.3	1.6	.1	2.0	2	4.0		
Local Freight Switching at Lodi Tues Sat 800' 10 mph	.4	.9	-.0	.1	1.3	8*	20.4*		.3	.9	.1	1.3	8*	20.4*		
Station Present Location								Total Daily Delay: Passenger 49.0							Total Daily Delay: Passenger 29.0	
Passenger Train <sup>2</sup> Northbound 610' 10 mph	.4	.7	1.25	.1	2.45	10	24.5		.4 <sup>1</sup>	.7	2 <sup>1</sup>	1.7	10	17.0		
Passenger Train <sup>2</sup> Southbound 610' 10 mph	.4	.7	1.25	.1	2.45	10	24.5		.4	.7	.1	1.2	10	12.0		
Station South of Pine Street								Total Daily Delay: Passenger 29.0							Total Daily Delay: Passenger 24.0	
Passenger North-bound <sup>2</sup> 610' 10 mph	.8 <sup>1</sup>	.7	-.0	2 <sup>1</sup>	1.7	10	17.0		.4	.7	.1	1.2	10	12.0		
Passenger South bound <sup>2</sup> 610' 10 mph	.4	.7	-.0	.1	1.2	10	12.0		.4	.7	.1	1.2	10	12.0		
Through Passenger Trains <sup>2</sup> North and South 610' 40 mph	.3	.2	-.0	.1	.6	20	12.0	Total Daily Delay: Through Passenger 12.0	.3	.2	.1	.6	20	12.0	Total Daily Delay: Through Passenger 12.0	

- \* 4 trips in each direction across crossing/day estimated and includes an additional 10 minutes/day in other switching  
1 Crossing gates will operate down and up as train approaches and stops clear of crossing and again when train departs  
2 Trains include both commuter and intercity services  
3 2 locomotives + 12 freight cars  
4 2 locomotives + 6 passenger cars  
5 Assumes station located away from downtown Lodi

TRANSMETRICS, INC.  
11/82 PAS



Table 11 ESTIMATED DAILY DELAY AT SP CROSSINGS IN DOWNTOWN LODI		
Scenario	Pine Street	Elm Street
Current station site	Daily delay = 98.6 minutes	Daily delay = 78.6 minutes
Station south of Pine Street	Daily delay = 78.6 minutes	Daily delay = 73.6 minutes
Station outside downtown	Daily delay = 61.6 minutes	Daily delay = 61.6 minutes
No passenger service	Daily delay = 49.6 minutes	Daily delay = 49.6 minutes

Data from the grade-crossing analyses were combined with traffic volumes to forecast the length of queues expected in peak hours at Pine and Elm Streets. Current traffic volumes and volumes forecast under the conditions of General Plan Buildout (not expected for many years) were analyzed and results are shown in Table 12.

Table 12 LODI: ANALYSIS OF VEHICLES STOPPED AT SP TRACKS				
Scenario	Current Maximum Vehicle Queue		General Plan Buildout Maximum Vehicle Queue	
	Pine Street	Elm Street	Pine Street	Elm Street
Current station site	11-14	9-18	18-23	9-18
Station south of Pine	7-10	6-13	12-16	6-13
Station outside downtown	3	3-6	4-6	3-6

The table indicates the maximum vehicle queues expected; the range indicates vehicles in both directions at the same period (i.e. the lower number is the 'off-peak' direction).

There is sufficient capacity on Pine, Elm and Sacramento Streets to accommodate these queues if the station is located south of Pine. In addition, it is likely that actual numbers of queued vehicles will be lower than forecast because:

1. The grade crossing analysis assumes the gates will remain down for a given event (crossing or stopping). In actuality, gates may be up during part of the event; allowing some vehicles to pass.
2. Knowledgeable drivers will often divert their trips to a crossing that is free (e.g. Lodi Avenue) when they hear a train coming.



3. A planned (though controversial) grade separation at Lodi Avenue could be constructed prior to General Plan Buildout.

Based on these analyses, it was concluded that a downtown location in Lodi would work well and that Site 2 is preferred because of its lesser impact on grade crossings.

## MANTECA AND LATHROP

### Issues Relating to Rail Service

This area presents probably the most complex situation because of the myriad of rail service options possible.

Figure 8 indicates a variety of potential services in the Manteca/Lathrop area. It postulates a number of service scenarios:

1. San Joaquin Valley service on the SP through Manteca to Stockton.
2. Altamont service on the UP exclusively from Tracy to Stockton.
3. Altamont service on the UP through Tracy, switching to the SP at Lathrop north to Stockton.
4. Altamont service on the SP exclusively (requiring a new connection to the UP at Altamont).
5. A branch of Altamont service to Manteca and south (using the SP "Wye" if Altamont service is on the SP; requiring a new connection if service is on the UP).

The goal in this area was to serve as much of this potential, without sacrificing the other important characteristics of the multimodal station. The possibility of a joint Lathrop/Manteca site was examined as well as separate sites serving each city.

Of the seven potential sites in the area, four were eliminated during the consultant team's technical analysis:

Site 1 on Moffat Blvd. was screened out because we believe Site 7 to be a superior downtown Manteca site. It is in the heart of downtown, in the triangle surrounded by Main, Yosemite and the SP tracks. It is superior to the Moffat site in that it is within close walking distance of the downtown commercial area; already adjacent to a City parking lot that is not now heavily used. It's on railroad land that is contemplated for purchase by the City. It has adequate space for a platform, extra parking and a station structure.



project the selling price the Southern Pacific or Union Pacific Railroads might seek for these parcels in view of their use for a public agency rail transportation project. It is likely that these estimates are lower than actual market cost. The acquisition costs estimated in this manner ranged from \$30,000 for outlying stations up to \$350,000 for downtown sites.

Further refining of real estate costs should be done by a real estate appraiser familiar with values at those sites that remain after the next stage of selection.

## POTENTIALLY SIGNIFICANT ENVIRONMENTAL EFFECTS

Potentially significant environmental effects of the project were identified through site visits and a review of currently available information. In most cases, further studies will be required for effects that are identified as potentially significant to determine the actual significance and severity of the effect. Potential effects of primary concern are *italicized* and discussed further by issue area at the end of this chapter. Other environmental issues that are probably not significant (but should be further investigated to meet CEQA requirements) are also identified. The impacts at each site are summarized in the beginning of this section and are later discussed in greater detail.

### Lodi Site #1

- 1) Air Quality
  - Construction effects on local ambient air quality.
  - Operational effects on local ambient air quality.
- 2) Noise
  - Operational effects on ambient noise levels.
- 3) Transportation
  - Additional traffic in the project vicinity.
  - Demand for new parking in the project vicinity.
  - Alterations existing circulation patterns and rail traffic.
  - Traffic hazard increases.
- 4) Public Services
  - Delays in Fire Department response times.
- 5) Human Health
  - Hazardous substances in the project vicinity due to industrial uses.*
- 6) Other Issues That Should Be Investigated
  - Police Protection, Road Maintenance, Public Utilities, and Historical Resources.





**Lodi Site #2**

1) Air Quality

Construction effects on local ambient air quality.  
Operational effects on local ambient air quality.

2) Noise

Operational effects on ambient noise levels.

3) Transportation

Additional traffic in the project vicinity.  
Demand for new parking in the project vicinity.  
Alterations existing circulation patterns and rail traffic.  
Traffic hazard increases.

4) Human Health

*Hazardous substances in the project vicinity due to industrial uses.*

5) Other Issues That Should Be Investigated

Fire Protection, Police Protection, Road Maintenance, Public Utilities, and Historical Resources.

**Manteca Site #7**

1) Air Quality

Construction effects on local ambient air quality.  
Operational effects on local ambient air quality.

2) Noise

Operational effects on ambient noise levels.

3) Transportation

Additional traffic in the project vicinity.  
Demand for new parking in the project vicinity.  
Alterations existing circulation patterns and rail traffic.  
Traffic hazard increases.

4) Human Health

*Hazardous substances in the project vicinity due to industrial uses.*

5) Other Issues That Should Be Investigated

Fire Protection, Police Protection, Road Maintenance, Public Utilities, and Historical Resources.



## 6. ECONOMIC ANALYSIS

### INTRODUCTION

The economic analysis is oriented toward three objectives for each city: (1) to use economic development as one of the factors affecting station site location, (2) to determine the joint development opportunities which may exist at selected stations, and (3) to estimate the economic benefits to the cities which may result from the stations.

To prepare the economic analysis, the consultant team's economic sub consultant, Keyser-Marston Associates (KMA) interviewed the staff of selected city and county agencies and other relevant public jurisdictions. As a next step, KMA prepared a concise market analysis of the development potential in the immediate area of each alternative station location.

Each market analysis included a review of demographic trends, market conditions, and projected development patterns in the immediate area of each potential station site. Finally, KMA calculated the direct economic benefits which may be generated for each city by the potential transit-related development in the immediate area of each of the alternative station locations. The projected direct economic benefits for each city include property tax revenues, sales tax revenues, and employment. The complete economic analysis is contained in a memorandum dated February 3, 1993.

A summary of the principal findings for each of the potential sites is contained below. An estimation of direct economic benefits for each site is contained in Table 14 at the end of this Chapter.

### LODI DOWNTOWN (Site 2)

The facility would consist of the station building, a large public plaza at the southeast corner of the intersection of Pine Street and Sacramento Street, a bus transfer area, and parking for over 200 vehicles. The existing station building has approximately 2,000 square feet of space: this could be expanded by up to approximately 1,400 square feet by utilizing portions of the overhang area of the porch on the train side of the building. Additional building space could be developed in the plaza.

Relocation of the station from its current site would create a large vacant parcel (estimated at approximately 1.3 acres) bounded by Elm Street to the north, the Southern Pacific tracks on the east, Pine Street to the south, and Sacramento Street on the west. This parcel would offer a significant development opportunity at a key downtown location.

#### Market Analysis

Lodi is located directly in the path of large scale population growth from both Stockton and Sacramento. During the period from 1980 to 1990, the population of Lodi grew from 35,221 persons in 1980 to 51,874 persons in 1990 - a 47 percent increase. In response to this trend, the City of Lodi adopted a series of development policies to manage growth: these include a two percent annual cap on population increases. The Lodi public schools have had significant increases in enrollment, and are currently on a year round calendar.



Lodi's demographic profile, based on data from the 1990 U. S. Census, indicates that the city is generally typical of state norms in terms of overall population characteristics, ethnicity, income levels and housing patterns.

Demographic data indicate that residents of the immediate Downtown area adjacent to the station location would provide limited market support to retail space at the station constructed as part of a joint development program. However, the location of the station in the center of the Downtown would draw market support from the entire city: as a result, the demographics of the immediately surrounding area would not be important to the success of joint development at the station.

Downtown Lodi traditionally was the center of commercial activity in the city. However, recent development trends have produced a decentralized, multinodal commercial base in Lodi, with retail sales dispersed throughout the city. As a result, downtown is no longer a major retail center, but is more of a mixed-used area with small retail and government offices. Based on data from City staff, downtown retail activity currently generates approximately four percent of the total sales tax revenues received by the City.

Lodi has an attractive, well developed downtown. The commercial core is focused primarily on School Street and also on Sacramento Street, north and south of Pine Street, and extends to several adjacent blocks. School Street, the principal downtown retail, banking and service location, is a traditional "Main Street". Sacramento Street, which fronts on the Southern Pacific tracks, focuses more on near industrial uses, with a mix of affordable residential uses and related services. Pine Street is a major east/west access - one of only four east/west streets which connect across Route 99.

The potential station site has a highly visible and prominent location at the major eastern entrance to the downtown commercial core on Pine Street. To the south of the site, on Sacramento Street, are a series of successful auto service firms, near industrial businesses and promotional retailers. To the immediate west is the attractive pedestrian area along School Street. To the north is a relatively economically depressed area of Sacramento Street, which contains several restaurants, other retail uses and residential uses. To the east, across the tracks, is a mix of retail space, restaurants and residential uses.

Downtown Lodi is essentially built out. Very little new development has occurred in downtown during the past several years, since lease rates are not high enough to support new construction. However, there has been significant investment in downtown through leasing activity and renovation of existing building space.

There are currently no proposals for new development in downtown Lodi, based on information from City staff. While the City monitors development in downtown, the City currently has no redevelopment agency and does not plan to create one. As a result, any new development in downtown will be unassisted.

The vacant parcel which would be created by the relocation of the station from its current site to the southeast corner of the intersection of Sacramento Street and Pine Street might generate an impetus for new investment in the downtown. The parcel, bounded by Elm Street to the north, the Southern Pacific tracks on the east, Pine Street to the south, and Sacramento Street on the west, would be in a key downtown location because of its proximity to the multi-modal facility.



### Economic Benefits

The development of the multi-modal facility would generate several economic benefits for the downtown commercial core.

The facility would have an immediate visual impact on the station area, which would improve the economic viability of the area by changing the perception of its role in the downtown. The design of the facility would be integrated into the existing building inventory in the downtown commercial core, since the facility would be housed in the historic depot. Creation of the proposed formal landscaped plaza in front of the depot would provide a high quality public space which could serve as an immediate visual focus for the station area: it could be a meeting place and entry for pedestrians. In addition, the parking and landscaping improvements associated with the depot would create a significant visual impact in the immediate vicinity.

Overall, the relocation and renovation of the existing abandoned depot would substantially upgrade the appearance of the intersection of Pine Street and Sacramento Street, providing a much improved entrance to downtown, and would extend the pedestrian environment of School Street to the east.

The transit services in the facility would provide a significant new focus of activity in downtown Lodi, due to the number of transit riders who would use the facility. While no detailed ridership projections have been prepared, it is generally estimated that several hundred people would use the facility on a daily basis. This would be the equivalent of a major new retailer or employer locating in the downtown in terms of activity. Since many of the riders would be people who do not currently travel through the downtown, a significant portion of the ridership would result in new downtown activity.

The facility could also include public or nonprofit uses such as an information office, a visitor center, a small museum or exhibit gallery, chamber of commerce functions, City services, volunteer services. These types of functions could provide onsite management and security services.

The non-transit commercial uses in the facility could include retail and service activity. These uses could be a catalyst for adjacent businesses. Among the uses which could be located in the facility are a restaurant, deli/sandwich shop, coffee and snack bar, convenience food outlet, specialty food outlet (bakery, pizza, ice cream, ethnic food), specialized news/magazines/book store, film processing, video rental. These uses could be located not only in the depot building, but in new space (small scale retail space or kiosks) in the plaza in front of the building. The plaza, which would have excellent visibility and access, would in fact be a preferable location for retailers. Smaller stand-alone activities such as film processing and ATM's (automatic teller machines for banking) would also be well suited to the plaza.

The joint development potential of the station location is excellent because of its central location, ease of access, abundant parking, proximity to the downtown commercial core for lunchtime business, and some built-in market support provided by transit riders. The only type of retail activity mentioned above which would require substantial additional market support would be a larger restaurant.

The development of the site which would be created by the relocation of the historic depot building could generate additional economic benefits for the City. The site, which would be approximately 1.3 acres in size, could accommodate approximately 14,000 square feet of retail and/or single story garden office



space, if developed at a relatively low density. More intense urban development would yield additional space. This development, in concert with the station, would provide a significant upgrading of the station area, and might eventually generate demand for additional economic activity on adjacent sites.

### **MANTECA DOWNTOWN (Site 7)**

The proposed site of the terminal is currently a largely undeveloped area adjacent to the Southern Pacific tracks. Adjacent to the site is a City-owned public parking lot with 39 spaces in the area. The terminal plan proposes that Moffatt Boulevard be extended from Main Street to create a vehicular entrance to the area. Traffic is a central concern in the area, and the circulation to and from the terminal would be designed to minimize any additional traffic impacts. At least a portion of an approximately two acre parcel containing a lumberyard would be acquired for access. The acquisition and construction of the terminal would transform the lumberyard property into a well located site for possible development.

### **Market Analysis**

Manteca is situated in an area of continuing rapid population growth between Stockton and Modesto. During the period from 1980 to 1990, Manteca experienced one of the most rapid rates of population growth among cities in San Joaquin County, from 24,925 persons in 1980 to 40,772 persons in 1990 - a 64 percent increase. The City of Manteca in 1988 adopted a Community Growth Management Plan. That plan restricts residential growth to a maximum of 3.9 percent per year of the then-available housing stock. Because the City cannot legally grow faster than 3.9 percent per year, the growth rate experienced from 1980 to 1990 cannot continue. In fact, growth in the early nineties has been approximately 2 percent per year.

Manteca's demographic profile, based on data from the 1990 U. S. Census, indicates that the city generally follows state patterns in terms of overall population characteristics, ethnicity, income levels and housing patterns.

Similar to Lodi, residents of the immediate downtown area adjacent to the station location would provide limited market support to retail space at the station constructed as part of a joint development program. However, the location of the station in the center of the downtown would draw market support from the entire city: as a result, the demographics of the immediately surrounding area would not be important to the success of joint development at the station.

Manteca has experienced significant development of both residential areas and convenience retail space in the past decade because of its rapid population growth. The city has developed in all directions, but particularly toward the north and west, away from the downtown. All the significant recent retail development has been located in close proximity to the new residential areas.

Manteca has an established, pleasant downtown. Downtown Manteca has kept much of its traditional role as the center of commercial activity in the city in spite of recent trends which have resulted in the development of convenience centers dispersed throughout the city.



**Table 15**  
**Summary of Key Features of Public Funding Sources**

Name	Derived from	Uses/ Restrictions	Applicability to this Study	Key Concerns
Prop. 108/116*	Bonds (state general fund)	Urban + commuter rail/intercity rail	good	Amounts set in ballot measures
Article XIX/ TCL/intermodal*	TP&D Account (gas tax and sales tax)	Multimodal facilities & transit capital projects	good	competition very keen
Measure K	1/2 cent local sales tax	As per ballot	excellent	Other demands for sales tax money
ISTEA	Federal gas tax and general funds	Congestion and air quality relief; much flexibility in surface program. Transportation Enhancement Activity (TEA) funds may be used for historic preservation	good	Subject to Federal appropriations
FTA Section 3	Same as above.	Transit	good	New rail starts earmarked by Congress
FTA Section 9/18	Same as above.	Transit	fair	Keen competition
Assessment District	Special assessments on real property	Further purposes of district	fair	Has been unpopular in other areas
Redevelopment Agency	Tax increment	Redevelopment purposes	good	Burdensome to set up for one project, Tracy and Manteca have agencies already
Transit Development Act	1/4 cent sales tax	Transit	fair/poor	Key source of transit operating support
* The state combines these sources when prioritizing projects and allocating funds, although they are derived from different sources.				

The threshold criteria that must be met before a project is ranked are:

- Statutory eligibility (e.g., minimum farebox ratios required by state law)
- Regional approval (by SJCOG), prior to application (projects should also be included in SJCOG's RTP)



## 8. RECOMMENDATIONS

### INTRODUCTION

This Chapter summarizes the consultant team's recommendations concerning the multimodal stations in the various cities.

#### LODI

There is a high probability, though no definite assurance that passenger trains will be running in the future on the SP through Lodi. In any case, the SP provides the only reasonable location for a multimodal terminal in Lodi.

Therefore it is recommended that Phase II planning should be initiated on a multimodal station at Site 2 in Lodi to perform more detailed planning, environmental analysis, and preliminary design. Key issues requiring resolution in Phase II are:

- Official Historical Commission approval for moving the station;
- Traffic signal planning at Pine, Elm and associated streets;
- Land use planning for the current depot site;
- Hazardous materials investigation;
- Joint development at new station;
- Associated local bus system planning;
- Coordination and preliminary negotiations with SP on land acquisition and yard operations;
- Further planning and coordination regarding tire store on Sacramento, south of Pine; and
- More detailed investigations of and preliminary decisions regarding financing and ownership of the station.

#### MANTECA/LATHROP

Planning should proceed on a slower pace in Manteca/Lathrop than Lodi until the picture of rail service and related development becomes clearer. The following information needs to be clarified:

- Further resolution of the question of Amtrak service on the Santa Fe versus the SP. This question could be resolved in the next few months (April/June, 1993).